

## Social influences on eating. An introduction to the special issue

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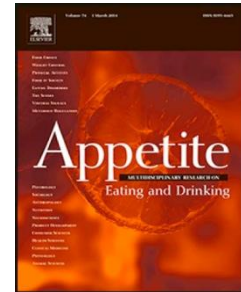
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Social influences on eating: An introduction to the special issue

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More than a decade ago, we reviewed the literature on social influences on eating and provided some preliminary ideas about what was happening in the subareas of social facilitation, modeling, and impression management (Herman, Roth, & Polivy, 2003). Since that time, considerable work has been done on social influences on eating, expanding the empirical base, testing old ideas and introducing new ones. It struck one of us (SH) that the time had come for a focused look at the current state of the literature and that the other (CPH) might help to organize a special issue of *Appetite* on the topic of “social influences on eating.” The idea was to gather under one cover up-to-date reviews of subareas of the topic, along with a variety of recent empirical contributions; and the hope was that such a collection of papers would provide a good summary of where things stood at the moment. Perhaps more important, we imagined that by pulling together such a collection, we could focus attention on an area that has been historically undervalued by the community of eating researchers and stimulate further research by identifying theoretical and empirical gaps in our understanding. Whether we have succeeded only time will tell.

The review papers in this special issue were commissioned by the editors. We decided that it was important to have these specific subareas of social influence represented in the special issue, and review papers do not write themselves. We selected five subareas and identified people who were well-positioned and willing to write review papers. These reviews cover various social influence processes, specifically as they pertain to eating: modeling (Cruwys, Bevelander, & Hermans), social norms (Higgs), social facilitation (Herman), impression management (Vartanian), and social comparison (Polivy & Pliner). The reviewers were instructed to provide an overview of the area and to highlight issues that they considered to be especially worthy of attention and further research. Some of these reviews specifically focus on the years since the publication of the Herman et al. (2003) more general review. All of these reviews were peer-reviewed and in many cases were revised significantly. Inevitably, there is some overlap among these reviews, if only because the various social-influence processes do not have tight boundaries. Thus, modeling and social norms drawn on some of the same themes; and social comparison, as Polivy and Pliner demonstrate, is in some sense a precondition for the operation of other social-influences processes.

The empirical studies reported here were not commissioned. Rather, we sent out a call for papers to the research community (via listserves and professional associations). Potential authors submitted abstracts that were screened initially only for topicality. Full papers were subjected to normal peer review and further screened for pertinence and quality. The empirical reports included in the special issue represent the best of the submissions and reflect the state of the art of research on social influence on eating – at least in the sense that they provide us with a good sample of what sorts of research are currently underway. It would have been nice if we could offer at least one empirical paper corresponding to each of the review topics, but some topics are attracting more research attention than are others.

Cruwys et al.’s review of modeling documents the very powerful effects of the example of others on intake, and to a lesser extent, on food choice. Such research has been around for four decades, but appears to be accelerating, with increasing attention being paid to possible

moderators of the effect. Likewise, as the robustness of modeling has been established, more attention is paid to mediators or underlying mechanisms, leaving us with higher-order questions about exactly why and how modeling occurs. Candidate explanations, not necessarily mutually exclusive, range from uncertainty to desire for affiliation to behavioral mimicry. The review offers countless suggestions (implicit and explicit) for further research.

The popularity of modeling research is reflected in the dominance of modeling studies among the empirical articles. Kaisari and Higgs explore two possible moderators of the modeling effect – whether the dining companions are familiar with each other or not and whether the dining companions eat the same or different foods. The modeling effect is strong regardless of these manipulations, with implications for our appreciation of the subtleties of the modeling effect. (It is perhaps worth noting that Herman, in his review of social facilitation, mentions an incidental finding of Kaisari and Higgs – namely that stranger dyads eat less than do friend dyads. This finding was of no particular interest to Kaisari and Higgs, but speaks to an issue of major concern for Herman. Once again, one person's incidental finding may be important to someone else.)

van den Boer and Mars hypothesize that modelling might be underpinned by mimicry of specific eating behaviors, such as bite frequency. They test this idea in a study that involves a confederate eating a fixed meal at a slow, medium or fast pace. They find that the bite frequency of the participant is not related to that of the confederate, perhaps because it is a stable trait. However, the participant ate less in the fast and medium conditions than in the slow condition, possibly because eating was inhibited when the confederate was no longer eating. At first pass, the results do not appear consistent with a previous report of observed congruency in eating pace (Hermans et al. 2012). However, it could be that while there is no specific mimicry of bite frequency, co-eaters naturally synchronise their eating actions within certain limits to smooth social interactions. Importantly, the results of this study emphasise the complex nature of social interactions during meals and the multiple mechanisms that are likely to underlie social influence on intake, which are only beginning to be understood.

In the final modeling study, Palfreyman and colleagues provide additional validation for the Parental Modeling of Eating Behaviours Scale (PARM), a tool developed to assist in the study of modeling in situations in which a child might be expected to model the intake of its parent (typically, mother). The validation provided in this study extends the potential range of modeling studies to include the sorts of parent→child social influence that is presumed to underlie much of the chronic behaviour evident in adults (i.e., former children).

The second review paper, by Higgs, focuses on how social norms affect food intake and choice. Social norms represent a sort of “collective” confederate, with the norm reflecting what people in general (or at least specific groups of people) do or approve of. Higgs's principal contribution is her focus on why social norms have such a profound influence on people's behavior. She attempts to integrate the safety, affiliation, and approval motives that have been postulated to lead people to adhere to social norms. These motives, which are often regarded as separate and even competing, may be viewed as convergent, sharing an adaptive element reflected in basic reward processes in the brain.

Stok and her colleagues report two studies in which a norm (in this case, an explicit “rule”) against eating is imposed and the consequences observed. Whether the rule is presented as a requirement or as a suggestion makes no difference to its immediate suppressive effect on intake, but the suggestion is less likely to elicit reactance and to backfire by promoting subsequent intake.

Pedersen and colleagues find that, contrary to popular belief, adolescents are more likely to follow the lead of their parents than of their peers, at least when it comes to intake of fruit and vegetables. Parents’ descriptive norms (i.e., what they do) are more influential than are their injunctive norms (i.e., what they say).

Herman provides the first comprehensive review of the literature on the social facilitation of eating, covering 30 years of diary, observational, and experimental studies. He assesses the various explanations for why people eat more in groups than when alone and attempts to explain some nuances of the data (e.g., social facilitation is more pronounced among friends than among strangers). He offers some proposals to help understand social facilitation, drawing attention to the likelihood that larger meals in groups are probably arranged in advance.

Vartanian updates his 2007 review of the literature on consumption stereotypes (i.e., how your food choices and intake affect others’ impressions of you) and impression management (i.e., how you can deliberately manipulate others’ impressions of you by eating in a certain way).

Vartanian focuses here on the emerging literature on food choice/intake and masculinity ratings and makes clear that there is much interesting work yet to be done.

The paper by Olszewski and colleagues reminds us that social context has a powerful effect on the eating behaviour of both human and non-human animals. They report that an oxytocin receptor antagonist increases sugar intake, but this effect is dependent upon the position of the rat in the group social hierarchy and is moderated by the presence of another rat. The oxytocin receptor antagonist increased sugar intake in dominant rats regardless of social context, but it increased the intake of subordinate rats only when social cues were absent. One interpretation of these results is that social interaction dampens the effect of sucrose consumption on oxytocin release in subordinate rats. While the function of this response is unclear and the implications for understanding human social eating are not immediately obvious, it is interesting to speculate that some aspects of social influence on eating across species may be mediated by changes in hormones such as oxytocin.

Polivy and Pliner conclude the special issue with a review of the role of social comparison processes in eating. They point out that comparing ourselves with others (in terms of appearance and well as food choices and intake) plays a crucial role in determining what and how much we eat. They review several interesting studies exploring such comparisons and argue that most of the social influences on eating covered in this special issue hinge on social comparison.

We hope that readers of this special issue will come away with a greater appreciation of how social influence processes affect food choice and intake. Readers will, we hope, also come away with many ideas for additional research. There are so many questions unanswered (or even unasked) at this point. If this special issue stimulates more research and more incisive thinking

about how social factors influence eating, then we will consider our goal to have been met. As is evident, there is an imbalance in the sort of research being done, with modeling and norms research being relatively overweighted. We hope that that imbalance will be corrected as research on social influences on eating blossoms.

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